CENTERIOR ENERGY

6200 Oak Tree Boulevard
Independence OH
216-447-3100

Mail Address:
P.O. Box 94661
Cleveland, OH 44101-4661

May 28, 1992

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
1919 M. Street, N.W., Room 222
Washington, D.C. 20554

Re: ET Docket No. 92-9

Dear Ms. Searcy:

Enclosed please find an original and five copies of the comments of Centerior Energy Corporation. Please return a date-stamped copy to the undersigned in the enclosed self-addressed stamped envelope.

Very truly yours,

Michael C. Regulinski
Counsel

MCR:syc

Enclosures

BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION

In the Matter of	)	
	)	ET DOCKET NO. 92-9
Redevelopment of Spectrum to	)	
Encourage Innovation in the	)	Comments to the Notice of
Use of New Telecommunications	)	Proposed Rule Making
Technologies	)	

To: The Commission

Pursuant to Section 1.415 of the Commission's Rules, Centerior Energy Corporation on behalf of The Cleveland Electric Illuminating Company and The Toledo Edison Company hereby respectfully submit the following comments on the Notice of Proposed Rule Making, FCC 92-20, released February 7, 1992, in the above-captioned matter.

Centerior Energy Corporation was formed in April 1986 upon the affiliation of The Cleveland Electric Illuminating Company (CEI) and The Toledo Edison Company (TE). With assets of over $12 billion, Centerior Energy is one of the largest electric utility systems in the nation. The Centerior operating companies serve 2.6 million people in a combined service area of 4,200 square miles in Northern Ohio.

The Centerior operating companies would be directly and adversely affected by a reallocation of spectrum in the 1850-2200 MHz band for the creation of a spectrum reserve for redevelopment of emerging technologies. The operating companies use the 1850-2200 MHz band for several critical functions, such as point-to-point transmission line protective relays, the control and monitoring substation breakers, and the operation of essential mobile radio systems used to cover the large urban and rural service territory.

The following comments point out specific concerns of the operating companies including the significant cost increases and diminished reliability in protective controls. Internal cost estimates for replacement of 1.85 to 2.20 GHz microwave with fiber optic at CEI and TE exceeds $15 million. The FCC should mandate remuneration based on relocation to fiber optic rather than another point-to-point microwave band. Relocation to fiber optic would maintain the highly reliable signal needed for high voltage transmission line protective relaying and would conserve radio spectrum for future needs that only radio can fulfill.

Minimizing interference to and from Personal Communications Systems (PCS) is not adequately addressed in the Notice. The FCC contends that interference problems will be solved by direct negotiations between existing users and the parties developing new services. The FCC implies that the two parties will be able to reach equitable compromises satisfactory to both parties. Realistically, however, there are no guidelines for mutual coexistence (co-primary use) nor any real incentives to resolve interference problems. Unlike the private users who coordinate frequency selection among

adjacent and nearby microwave systems according to FCC part 94.63, the new PCS systems have no coordination constraints and could cause significant interference with no recourse for existing users.

Paragraph 20 encourages the relocation of 1.8 to 2.2 GHz users with paths less than 10 miles to frequency bands above 10 GHz. This would affect the majority of the Cleveland Electric Illuminating Company's microwave links. These links are used for high voltage transmission line protective relaying. Transmission line faults normally occur during rain, snow and ice storms, the very time when microwave signal loss (attenuation) in frequency bands above 7 GHz is greatest and the microwave paths are least reliable. Since microwave protective relaying is most urgently needed during rain, snow and ice storms, frequencies above 7 GHz are not a viable or acceptable option.

The characteristics of the 3 and 6 GHz bands make them technically acceptable alternatives. The FCC should allow the utilities to use the 3 GHz Common Carrier band and apply the same technical standards as Part 94 to both bands. The FCC Private Radio Bureau data on existing microwave systems indicates that there is sufficient spectrum in these bands to accommodate existing 1.8 to 2.2 GHz microwave users in most areas of the country.

The Notice states that microwave operations could continue indefinitely in rural areas where less spectrum is required. The rural areas served by Centerior are the far northwestern and the far northeastern areas of Ohio. Each of these rural areas has major interstate highways or thoroughfares which undoubtedly will be covered by the new cellular PCS systems. The same

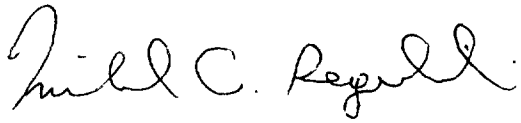
type of interference expected in the urban areas can be expected in the rural areas, albeit in isolated areas. Nevertheless, interference from PCS units on highway systems precludes indefinite reliable operation of the existing microwave systems. Thus, the burden of the proposed rulemaking falls upon electric utilities who must provide safe, reliable electric service pursuant to state and federal guidelines.

In order to ease the burden on displaced electric utilities, the FCC proposes to encourage monetary negotiations between PCS users and existing microwave users. Although frequency spectrum might have commodity value, it is unclear whether the private user may sell off frequency availability without FCC intervention. Further, why would a PCS cellular company pay for spectrum that they can simply license and use regardless of the effect on existing users? Particularly in rural areas, the cellular company has little incentive to eliminate isolated interference areas. The Notice does not include any practical incentive for the PCS companies to directly negotiate a settlement.

The Notice discusses the use of non-radio communications media such as fiber optics. Fiber optics is technologically acceptable from a reliability standpoint and superior from the standpoint of conservation of valuable frequency spectrum for those uses that require radio techniques. However, the cost of replacement of microwave links with fiber optic cable is a major concern. While using fiber optics is acceptable, internal costs estimates for replacement of 1.8 to 2.2 GHz microwave with fiber optic at CEI and TE exceeds $15 million.

The FCC views reallocation of the 1.8 to 2.2 GHz frequency band to PCS to be in the best interest of the general public. The PCS cellular companies will reap large economic benefits from use of these frequencies at the expense of former users. Relocation will cause higher costs to the utilities. It is reasonable to require cellular companies reaping the benefits to pay the displaced electric utilities hurt by the interference and reallocation. Since there is no incentive for PCS users to negotiate a fair and equitable settlement, it is imperative that the FCC provide and enforce mandates to provide remuneration for changing to alternative communications media. Remuneration should be based on relocation to fiber optic rather than another point-to-point microwave band. Relocation to fiber optics would maintain the highly reliable signal needed for high voltage transmission line protective relaying and would conserve radio spectrum for future needs that only radio can fulfill. Tax incentives, if beneficial and timely applied, could also ease the burden to utilities.

Respectfully submitted,



Michael C. Regulinski
Counsel

MCR:syc